BEFORE THE
NEW YORK STATE
PUBLIC SERVICE COMMISSION

----------x

Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric Service — Case 23-E-____

----------x

----------x

Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Gas Service — Case 23-G-____

----------x

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

July 31, 2023

TABLE OF CONTENTS

I. INTRODUCTION 1

II. PURPOSE OF TESTIMONY 6

III. NATURAL GAS SUPPLY REQUIREMENTS 7

IV. ELECTRIC SUPPLY REQUIREMENTS 17

V. STAFFING NEEDS 26

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

I. INTRODUCTION

Q. Please state the names of the members of the Electric and Gas Procurement Panel ("Panel").

A. Our names are Jeffrey M. May, Ting P. Chan, and Scott T. McDowell.

Q. Mr. May, please state your current employer and business address.

A. I am employed by Central Hudson Gas & Electric Corporation ("Central Hudson" or the "Company") and my business address is 284 South Avenue, Poughkeepsie, New York 12601.

Q. Mr. May, in what capacity are you employed by Central Hudson and what is your scope of responsibilities?

A. I am employed by Central Hudson as Manager of the Energy Resources Division ("Energy Resources"). In that capacity, I am responsible for managing the Company's electric and natural gas commodity procurement, commodity hedging, generation sales, and energy accounting activities. Energy Resources specific responsibilities for both gas and electric include: load forecasting; bidding and scheduling; settlement data coordination; development and implementation of hedge plans; asset optimization strategies; advocating policy positions on behalf of customers; invoice tracking, verification and approvals; monthly and quarterly financial reporting; Sarbanes Oxley compliance documentation; and audit reviews.

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

Q. Mr. May, what is your educational background and professional experience?

A. I earned a Bachelor of Science degree in Electrical Engineering from Worcester Polytechnic Institute in 1989. I also earned a Master of Engineering in Electric Power from Rensselaer Polytechnic Institute in 1995. I have been a New York State Registered Professional Engineer since 1996. My employment with Central Hudson began in 1989 as a T&D Junior Engineer in Customer Services. In 1992, I was promoted to Estimating Supervisor and served in that role until I was transferred to Associate Engineer in Substation Design in 1995. In January 1999, I was promoted to Power Marketer in a predecessor department to Energy Resources. I was promoted to Section Engineer – Distribution Engineering in September 2004, transferred to Section Engineer – Electric System Protection in January 2008, promoted to Director – Electric System Design in August 2010, promoted to Manager – System Operations in October 2013, and transferred to Manager – Energy Resources in August 2016.

Q. Mr. May, have you previously testified before the New York State Public Service Commission ("PSC" or the "Commission")?

A. Yes. I have testified before the Commission in Cases 17-E-0459, 17-G-0460, 20-E-0428 and 20-G-0429.

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

Q. Mr. Chan, please state your current employer and business address.

A. I am employed by Central Hudson and my business address is 284 South Avenue, Poughkeepsie, New York 12601.

Q. Mr. Chan, in what capacity are you employed by Central Hudson and what is your scope of responsibilities?

A. I am employed by Central Hudson as a Senior Energy Buyer. In that capacity, my responsibilities include planning, forecasting, negotiating, purchasing, scheduling, and verifying electric and natural gas commodity transactions required to serve Central Hudson's full-service customers. I am also familiar with hedging products and techniques, and with scheduling physical deliveries of natural gas and electricity. My current role as a Senior Energy Buyer is primarily to be responsible for the electric commodity procurement side of the business with backup responsibility for natural gas commodity procurement as needed. In addition to performing the electric commodity procurement activities needed to supply the daily electric usage of Central Hudson's full-service customers, I also participate in New York Independent System Operator ("NYISO") governance meetings and other industry meetings to protect the interests of Central Hudson's customers.

Q. Mr. Chan, what is your educational background and professional experience?

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

A. I earned a Bachelor of Science degree in Electrical Engineering from Cornell University in 1992. I earned a Master of Engineering degree in Electric Power from Rensselaer Polytechnic Institute in 1997. I earned a New York State Professional Engineer License in 2002. My employment with Central Hudson began in 1992 as a Junior Engineer in the Generation Planning area within the Engineering department. In 1994, I was promoted to Assistant Engineer in the Generation Planning area. In 1998, I was promoted to Associate Engineer and was re-assigned to work in the Electric Distribution Planning area. In 2003, I was promoted to Engineer in the Electric Distribution Planning area. In 2004, I was re-assigned to work as an Electric Operations Engineer in the Poughkeepsie District. In 2006, I was transferred to work as an Energy Buyer in Energy Resources. In 2023, I was promoted to Senior Energy Buyer in Energy Resources.

Q. Mr. Chan, have you previously testified before the Commission?

A. Yes. I have testified before the Commission in Cases 20-E-0428 and 20-G-0429.

Q. Mr. McDowell, please state your current employer and business address.

A. I am employed by Central Hudson and my business address is 284 South Avenue, Poughkeepsie, New York 12601.

Q. Mr. McDowell, in what capacity are you employed by Central Hudson and what is your scope of responsibilities?

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

A. I am employed by Central Hudson as an Energy Buyer. In that capacity, I am responsible for planning, negotiating, evaluating, procuring, and managing a hedged portfolio of electric and natural gas supply, transportation, and storage contracts. I perform load forecasting and analysis of wholesale electric and natural gas market dynamics to procure short and long-term energy resources to meet load requirements.

Q. Mr. McDowell, what is your educational background and professional experience?

A. I earned an Associate of Science degree in Business Administration / Management from Dutchess Community College in 1988. I also earned a Bachelor of Business Administration in Accounting from Pace University in 1990. My employment with Central Hudson began in 1990 as an Accounting Clerk in the 2218 bargaining unit. I was promoted to a management position as a Junior Accountant in the Plant Accounting Department in 1992. In 1995, I was promoted to the position of Assistant Plant Accounting Analyst. I transferred to the Taxes & Budgets Department as an Assistant Budget Analyst in December 1996. In 1999, I moved to a temporary position in a newly created Risk Management Department and within the same year I was asked to take a position in Energy Control. In 2000, I was promoted to an Energy Control Analyst in the Energy Control Department. In 2005, I was asked to take a position in the Plant Accounting Department and received a promotion to Senior

Plant Accountant in 2006. In 2011, I was promoted into Energy Resources as an Energy Buyer.

Q. Mr. McDowell, have you previously testified before the Commission?

A. Yes. I have testified before the Commission in Cases 20-E-0428 and 20-G-0429.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of the Panel's testimony in these proceedings?

A. The Panel will address: (1) Central Hudson's natural gas and electricity procurement strategies, plans and policies; (2) how the procurement strategies, plans and policies dampen price volatility for Central Hudson's customers; and (3) the need for incremental resources as a result of new opportunities and responsibilities in the commodity procurement space.

Q. What are the Company's objectives when purchasing natural gas and electric supply for its full-service customers?

A. The Company seeks the lowest reasonable natural gas and electric supply purchase costs for its customers, subject to reliability and contractual constraints. As part of this objective, the Company also seeks to dampen price volatility. In addition, the Company has considered ways to directionally align procurement with the goals of the Climate Leadership and Community Protection Act ("CLCPA"). For example, the Company is seeking approval to purchase Responsibly Sourced Gas ("RSG" or "Certified Gas"), with financial limits.

Q. Is the Panel sponsoring any exhibits in support of its testimony?

A. No.

III. NATURAL GAS SUPPLY REQUIREMENTS

Q. How does Central Hudson meet the natural gas supply requirements of its customers?

A. Central Hudson meets its customers' natural gas requirements by utilizing various wholesale contract assets that deliver natural gas to the Company's four city gates. Natural gas is purchased primarily from suppliers located in the Northeastern United States ("U.S.") and transported on interstate pipelines pursuant to firm transportation ("FT") contracts to a Central Hudson city gate. Natural gas is also purchased from suppliers located in eastern Canada. Canadian gas is transported pursuant to FT contracts with Enbridge Gas (formerly Union Gas) and TC Energy (formerly TransCanada) to a delivery point with Iroquois Gas Transmission Pipeline at Waddington, New York. The Northeastern U.S. and Canadian supplies form a base of flowing supplies that are supplemented with storage gas and peaking gas contracts. Central Hudson also utilizes short-term supply contracts to meet its customers' demands for natural gas throughout the year. Offers are solicited via a competitive Request for Proposal ("RFP") process for the five-month winter season (November – March) as well as monthly and/or the summer season based on volumetric needs. The gas supplied by the above

contracts is delivered using FT to Central Hudson's four city gate stations (Cedar Hill, Pleasant Valley, Somers, and Tuxedo) by four interstate gas pipelines (Tennessee, Iroquois, Algonquin, and Millennium) and FT supporting contracts with Texas Eastern, Columbia, Stagecoach, TC Energy (formerly TransCanada) and Enbridge Gas (formerly Union Gas) Pipelines. In addition, Central Hudson has seven contracts with four companies for the storage of natural gas. Storage gas is transported to Cedar Hill, Somers, and Tuxedo by four of the interstate pipelines utilizing Firm Storage Transport ("FST") service. The FT, storage and FST contracts are long-term (multi-year) agreements. Central Hudson also utilizes peaking contracts in winter months to meet firm peak day requirements during very high natural gas demand days.

Q. How does Central Hudson know how much gas supply to purchase for an upcoming season?

A. Central Hudson annually reviews the normal and peak day 5-year sales forecasts provided by Costs, Rates, & Forecasts. This sales forecast provides the basis for winter season normal and peak send-out and total send-out volumes. As a supplement to this information, Energy Resources calculates a 3-year and 5-year historical average monthly send-out to determine the monthly volumes expected for the upcoming winter season. Assumptions are made regarding the monthly volumes of storage to be used based on historical patterns and timing of contract

ratchet requirements. Base volumes of supply are procured to fill as much FT space as needed for each month; any remaining incremental requirements provide the basis for peaking services. Separately, a similar review of historical send-outs is performed prior to summer season supply RFPs. The seven-month summer season volumes are typically consistently low and predictable but they are similarly analyzed to determine requirements and maintain system reliability. Lastly, a matrix is created for storage refills based on winter season ending balances, achievement of 95% full by October 31st, and spreading refill volumes over the seven-month timeframe based on a dollar-cost-average strategy.

Q. What is Central Hudson's recent total system peak day capacity?

A. The table below shows, by component, Central Hudson's total system firm peak day capacity in Dth/day (2022/2023 heating season).

Flowing Supplies	48,942
Storage Withdrawals	40,939
Winter Peaking Service	43,000
Spot Gas	5,000
Recallable Capacity (Asset Management Agreement)	0
Marketer Provided Supplies	31,651
Total Central Hudson and Marketer Supplies	**169,532**

Q. What is the typical operating excess, or reserve margin, for gas distribution utilities?

A. The 2009 Management Audit Report issued February 28, 2011, in Case 09-M-0764, identified (on page VI-11) that the typical operating excess is 5-10% over the peak day demand.

Q. What is Central Hudson's position with respect to the volume of capacity needed as operating excess or reserve margin?

A. Based on a 10-year historical look-back period, the Company has neither exceeded its forecasted peak demand nor utilized any reserve margin supplies and the Company is comfortable remaining consistent with the low end of the range identified in the 2009 Management Audit Report (~5%) as an acceptable level of operating excess or reserve margin. The Company has continued to maintain this level of reserve margin as shown in our annual Winter Supply Review filings with New York Department of Public Service Staff ("Staff").

Q. What reserve margin did Central Hudson realize during Winter 2022-23 and how much capacity would be needed to deliver requisite supplies on a peak day basis?

A. Central Hudson's Winter 2022-23 actual peak day delivery capability totaled 169,532 dekatherms. This resulted in a peak day reserve margin of 5.5 percent based on the estimated firm requirements for 2022-23 Winter peak day forecasted design weather of 160,661 dekatherms.

Q. Does Central Hudson develop day-ahead forecasts to ensure reliability?

A. Yes, Central Hudson develops a day-ahead rolling demand reliability forecast to ensure that the short-term requirements of its natural gas customers are met.

Q. How does the Company forecast its day-ahead requirements?

A. Central Hudson has implemented a two-model system for the daily forecasting of natural gas requirements. The Company utilizes a combination of the results from an internally developed Excel spreadsheet model and a commercially developed model, GasDay, for forecasting daily rolling 24-hour send-out forecasts and supply requirements. The resultant forecast is comprised of a base load component (usage that is not weather sensitive) and a heating usage component (weather sensitive). Heating usage is calculated as the product of the daily forecast of effective degree days ("EDD") and usage per EDD. EDD is a measurement designed to reflect the demand for energy needed to heat a home after taking wind and cloud cover into consideration. A gas day (10am – 10am) weather forecast is received two times per day from the weather forecasting service vendor WSI, Inc. Depending on the specific month in the heating season, unusual weather patterns, or a particular day of the week or weekend, minor manual adjustments to the forecasted send-out may be necessary. The Company has the ability to make intra-day changes to the send-out forecast and requirements with gas suppliers or pipelines or both, as necessary, due to changes in the weather.

Q. Does the Company monitor the performance of its' gas send-out forecasts?

A. Yes, the Company monitors the performance of its gas send-out forecast to within a monthly average accuracy range of 95% to 105%, or +/- 5%, inclusive of weather accuracy.

Q. Why does Central Hudson develop long-term supply forecasts?

A. Each year, Central Hudson prepares a gas capacity/supply plan for the upcoming winter season in response to the Winter Supply Review filed with Staff to ensure that sufficient peak day capacity is available to firm service customers, who the Company has an obligation to serve. A five year sales and peak forecast is part of that annual review and filing. Central Hudson recognizes that actions to address supply needs must be initiated well in advance of the actual requirements, which provides the basis and importance of the forward-looking plan.

Q. Does Central Hudson have available excess upstream capacity?

A. Yes. The Company can have available upstream capacity at varying levels throughout the calendar year. The level of excess capacity is directly related to the customer demand requirements on any given gas day. The Company does not have excess capacity on any day when the send-out exceeds the Company's aggregate transmission capacity contract volumes.

Q. What does Central Hudson do with the available upstream capacity during off-peak periods?

A. Central Hudson releases available upstream transportation and storage capacity to an Asset Manager ("Manager") under an Asset Management Agreement ("Agreement"). The Agreement provides the Manager with Central Hudson's entire portfolio of storage and transportation capacity assets. The Manager can utilize the Company's excess capacity as it sees fit to extract value after slices of the system are released to Aggregators and the Company's daily delivery requirements are met. Operationally, the Company retains the responsibility to forecast system send-out and submits supply requirements daily to the Manager, who will transport daily base and storage requirements to the Central Hudson city gates as necessary to assure reliable gas supplies to the Company's full-service and delivery customers. Further, the Agreement provides storage refill services during the summer and, at any time necessary, the ability to purchase or sell daily volumes of spot gas. The Company has retained the ability to purchase base and peaking services through a competitive RFP process to maintain customer price transparency. The Agreement allows Central Hudson to optimize the value of the entire portfolio for the entire year. The system-wide Asset Management approach, in turn, maximizes the Company's ability to reduce commodity bill pressure.

Q. Has Central Hudson made any changes to its portfolio of transportation and storage contracts or supply mix in this case?

A. Central Hudson has not made any changes to its natural gas transportation or storage contracts during the current rate plan, aside from normal contract extensions, and has retained all physical storage contracts and associated transportation contracts for delivery of storage gas to the Company's territory. Central Hudson has considered Renewable Natural Gas ("RNG") and RSG as gas supply enhancements in support of the CLCPA's greenhouse gas emissions reduction targets. The Company began requesting separate pricing and availability of RNG in 2021 and RSG since early 2023 in each of its periodic competitive supply RFPs. The Company was successful in securing RSG as base supply during the summer of 2022 (May through October) under a Research and Development pilot project. Further, the Company was successful in procuring RSG base gas supplies below the annual weighted average cost of "standard" natural gas as part of its competitive RFP process. The Company procured RSG for its base supply for the April through October 2023 summer season.

Q. How does the Company view RSG going forward?

A. The Company has been including RSG as an alternative in its periodic supply RFPs. The Company intends to select RSG when competitive RFP pricing is at or less than the weighted average cost of natural gas

supply. Further, the Company is seeking authorization to procure RSG when RSG offers are higher than the annual weighted average cost of "standard" gas to the extent that the incremental cost in a supply year (April through March) does not exceed $200,000. The environmental and societal benefits of procuring RSG are described in detail by the Climate Leadership and Sustainability Panel.

Q. Does Central Hudson employ hedging or pricing strategies to dampen market price fluctuations with respect to its Winter gas supply contracts?

A. Yes. A hedging plan is developed by Energy Resources and approved by Central Hudson's Enterprise Risk Management Committee ("ERMC"). Energy Resources implements the approved hedge plan through managing physical storage injections and securing over-the-counter ("OTC") fixed for floating swap contracts with various counterparties prior to the upcoming winter heating season. These contracts are purchased on a set multi-month schedule to provide a dollar-cost average hedge price of winter natural gas supply contracts. The OTC contracts fix the price of a portion of Central Hudson's winter gas supply for the upcoming heating season and dampens price volatility. Central Hudson also refills storage during the April – October time period to ensure that its natural gas storage contract assets are physically full by the first of November, prior to the start of the heating season. The combination of financial investments and the Company's physical storage gas provides a hedge

against winter natural gas price volatility by fixing the price of Central Hudson's full-service customers' natural gas usage in accordance with the Commission's Statement of Policy Regarding Gas Purchasing Practices, issued and effective April 28, 1998, in Case 97-G-0600. The hedging strategy dampens natural gas price volatility, which translates directly to incrementally less volatile energy bills for Central Hudson's full-service customers during the heating season. Energy Resources reports on energy procurement activities and the current status of commodity markets to the ERMC on a periodic basis and conveys details of the hedging plan in the annual Winter Supply Review filing and meeting with Staff.

Q. Please describe the natural gas policy activities that Energy Resources participates in.

A. Central Hudson needs to stay informed of natural gas policy issues in both the U.S. and Canada. In the U.S., the Company focuses specifically on the Northeastern U.S. and New York State. Decisions by the Federal Energy Regulatory Commission ("FERC") relating to the Natural Gas Act can impact supply and transportation availability to the Company for its customers. Similar impacts can result from the Canadian Energy Regulator and Canadian supplies and transportation contracts. In late 2021, the Company's long-standing agreement with Alberta North East ("ANE") ended due to ANE closing their business. ANE provided supply

scheduling, administrative, and legal consulting services to Central Hudson and many other natural gas utilities in the Northeastern U.S. The scheduling and administrative responsibilities have been folded back into Energy Resources. The Company also has a vested interest in monitoring and participating in interstate pipeline rate cases or proceedings at FERC. Last, and perhaps most impactful, is the on-going CLCPA initiatives in New York State. Through Case 20-G-0131, mentioned above, the Company will have an opportunity to extend its gas supply planning process from five years to 20 years.

IV. ELECTRIC SUPPLY REQUIREMENTS

Q. How does Central Hudson meet the electric supply requirements of its customers?

A. Central Hudson meets the electric supply requirements of its customers principally through wholesale purchases made from the NYISO and through contract purchases (e.g., legacy contracts with independent power producers). The purchases from NYISO include electric energy, ancillary services, and electric capacity. In addition, small amounts of electric energy are obtained from Company-owned generation (hydro-electric generators and combustion turbine generators) retained primarily for local electric reliability purposes.

Q. How does the Company currently forecast day-ahead electric energy requirements?

A. The Company uses a cloud-based Software as a Service ("SaaS") application under contract with TESLA Forecasting Solutions ("Forecasting Solutions"). The Forecasting Solutions electric load forecasting model uses a combination of historical hourly electric load patterns and multiple weather forecasting services to develop a short-term forward forecast of the expected hourly electric load. The model produces a forecast of hourly electric load for a seven-day period. This hourly electric load forecast is developed by the Forecasting Solutions software using two different seven-day hourly weather forecasts (Maxar weather forecast and DTN weather forecast), historical hourly electric load data, and historical hourly weather data. The Forecasting Solutions software has proprietary programming routines that automatically choose the combination of historical hourly weather data and historical hourly electric load patterns to forecast the upcoming seven-day hourly electric load based on the two different seven-day hourly weather forecasts. The Forecasting Solutions software recognizes holidays, weekends, and other unusual electric load conditions so that the inclusion of such data does not distort the typical weather-load relationship. Central Hudson has retained the WSI, Inc. weather forecasting service, which an Energy Buyer can also use, in addition to other publicly available weather forecasts (e.g., the Weather Channel), to monitor changes in forecasted weather from the original time that the electric load forecast was developed. This

independent weather service (provided by WSI, Inc.), which is delivered via electronic mail twice daily, provides Central Hudson with an opportunity to proactively monitor and re-run the Forecasting Solutions software and revise the electric load forecasts as needed. The Energy Buyer also receives a monthly forecast of the total retail access customers' electric load. This retail access customers' electric load forecast is used to determine the Central Hudson full-service customers' hourly electric load requirements by subtracting the hourly weekday or hourly weekend retail access customers' electric load forecast from the Forecasting Solutions software's hourly electric load forecast.

Q. Do Central Hudson's electric load forecasts include the effects of solar photovoltaic ("PV") resources or battery storage resources?

A. Yes. The Forecasting Solutions electric load forecasting model performs a proprietary analysis on Central Hudson's system-wide aggregate electric load. The system-wide aggregate electric load includes the net effects of behind-the-meter ("BTM") solar PV resources and BTM solar PV resources that are coupled with battery storage resources. The Forecasting Solutions software considers the volume of interconnected BTM solar PV resources and their impact on the system-wide electric load forecasts. On a monthly basis, Central Hudson provides Forecasting Solutions with the latest cumulative total megawatt ("MW") quantity of interconnected BTM solar PV resources, including BTM solar PV

resources that are coupled with battery storage resources, that are interconnected to the Central Hudson electric system so that Forecasting Solutions can periodically update its electric load forecasting model and account for the effects of BTM solar PV resources when developing its hourly electric load forecasts. The cumulative total amount of stand-alone BTM battery storage resources interconnected to the Central Hudson electric system is less than 1 MW as of March 31, 2023, so BTM battery storage resources have a negligible impact on Central Hudson's electric load forecasting process. As BTM solar PV resources and stand-alone BTM battery storage resources increase on Central Hudson's electric system, Energy Resources will continue to communicate with the appropriate internal groups and provide the periodic updates to Forecasting Solutions. This will allow Forecasting Solutions to use this information to continue to adjust the electric load forecasting model to properly account for the changing Central Hudson electric system when used to develop hourly electric load forecasts.

Q. Does Central Hudson monitor the performance of its electric load forecasts?

A. Yes, Central Hudson monitors the performance of its electric load forecasts to within a monthly average accuracy range of 95% to 105%, or +/- 5%, inclusive of weather forecast accuracy.

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

Q. What electric generating assets does Central Hudson currently own?

A. Central Hudson currently owns, operates, and maintains two combustion turbine generators (Coxsackie and South Cairo) and three small hydroelectric generating facilities (Sturgeon Pool, Dashville, and High Falls). These electric generating facilities have nameplate ratings of 25.0 MVA, 25.0 MVA, 18.0 MVA, 6.0 MVA, and 3.6 MVA, respectively.

Q. How does Central Hudson manage these electric generation assets?

A. When not providing local electric reliability services, the Company maximizes the two combustion turbine generator assets by bidding and scheduling their availability in the NYISO Day Ahead Market and Real Time Market for electric energy generation and ancillary services and by using their electric capacity to financially benefit Central Hudson delivery customers. The three hydroelectric generating facilities are primarily run-of-river hydro units, and as such, they are used as electric load modifiers on the Central Hudson electric system and not bid or scheduled in the NYISO wholesale markets.

Q. Does Central Hudson have contracts with third party generators?

A. Yes, Central Hudson has three (3) residual and active legacy contracts with FERC Public Utility Regulatory Policies Act ("PURPA") Qualifying Facility Independent Power Producers ("IPP"). The aggregate maximum generation from these 3 IPPs is approximately 11 MW.

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

Q. Does Central Hudson employ hedging or pricing strategies to reduce the risk of market price fluctuations with respect to electric supply purchases made for full service electric customers?

A. Yes, Energy Resources annually develops an Electric Hedge Plan that recommends the volume and duration of financial and physical future electric energy product, electric capacity product, and weather option product needed to dampen the electric supply price volatility for full-service customers, excluding Hourly Pricing Provision ("HPP") customers. The annual Electric Hedge Plan is presented to, discussed with, and approved by the Company's ERMC. Once approved, Energy Resources implements the Electric Hedge Plan through competitive RFP purchases of products including financial electric energy Contract for Differences purchases, physical electric capacity purchases, and a winter season financially settled weather option purchase. Central Hudson's goal is to dampen the electric supply price volatility of full-service customers (excluding HPP customers) by locking in the price of a portion of the Company's full-service customers' forecasted annual electric supply in advance of the delivery month. Each annual Electric Hedge Plan is developed, and the performance is measured in accordance with the requirements outlined in the series of PSC Orders under Case 06-M-1017. Energy Resources reviews the Electric Hedge Plan twice annually with Staff.

DIRECT TESTIMONY OF THE ELECTRIC AND GAS PROCUREMENT PANEL

Q. Please describe how Central Hudson purchases its Electric Capacity (i.e., Unforced Capacity ("UCAP").

A. Central Hudson forecasts its UCAP requirements based on a three to five -year historical average. UCAP purchases made as part of Central Hudson's Electric Hedge Plan are done using competitive RFPs through the broker market and through bilateral transactions. Bilateral transactions also include the Company's two combustion turbine generators. The remaining amount of UCAP is purchased through the NYISO Capacity Market spot auction every month.

Q. In what electric market activities does Energy Resources participate?

A. Energy Resources actively participates in the NYISO Business Issues Committee ("BIC") and BIC sub-committee meetings. Specifically, Energy Resources team members actively participate in NYISO Installed Capacity Working Group, Market Issues Working Group, and Billing, Accounting, & Credit Working Group meetings. Additionally, Energy Resources actively monitors and participates with the Joint Utilities in meetings and the submission of comments related to a number of PSC proceedings, including but not limited to the Clean Energy Standard (Case 15-E-0302), Energy Storage Deployment (Case 18-E-0130), and Distributed Energy Resource Implementation of FERC Order 2222 (Case 22-E-0549). The Energy Resources Manager is a member of the Edison Electric Institute's Energy Policy Executive Advisory Committee. Participation in these

activities provides Energy Resources the ability to stay current with electric energy policy initiatives, anticipate future electric market and regulatory obligations, and also provides a voice for the Company's advocacy of electric energy policy rules that protect the interest of the Company's electric delivery customers.

Q. How does Central Hudson manage PSC Clean Energy Standard obligations?

A. Energy Resources assumed responsibilities associated with tracking, managing, and complying with the various Implementation Plans for Renewable Energy Credits ("REC") and Zero Emissions Credits ("ZEC"). While management of the Tier 2 REC and Tier 3 ZEC programs have been relatively straightforward, the management of the Tier 1 REC program has required significant labor resource hours. Energy Resources has folded in incremental responsibilities relating to managing the Tier 1 REC program through the New York Generator Attribute Tracking System ("NYGATS"). This NYGATS software requires a system administrator who is responsible for tracking Tier 1 REC obligation compliance through the New York State Energy Research and Development Authority ("NYSERDA") Tier 1 REC sales and through compliance certification for each compliance year since 2017. Further, the designated administrator also manually inputs Value Stack generation for validation by NYSERDA, minting of Tier 1 RECs, and managing sub-accounts in NYGATS to

minimize compliance costs and maximize electric delivery customers' and full-service electric customers' value.

Q. How has Central Hudson managed the PSC Energy Storage Deployment Order obligations?

A. Energy Resources has assumed lead responsibility for the Company's 2019 and 2021 bulk energy storage competitive RFP processes in response to the PSC's Energy Storage Deployment Program provided in Case 18-E-0130. Energy Resources assembled a cross-functional team of Subject Matter Experts in the areas of Legal, Engineering, Interconnections, Real Property, Treasury/Risk Management, Project Management, and NYISO Markets ("Energy Storage RFP Team"). This Energy Storage RFP Team developed the Company's Implementation Plan, a full set of RFP documents (including Appendices), two economic evaluation models (one for electric energy and ancillary services revenue and a second for electric capacity revenue), a project evaluation matrix, and a generic Energy Storage Services Agreement ("ESSA") for dispatch rights. The team successfully managed two competitive RFPs. The first RFP process (started in 2019) did not yield any Agreements for dispatch rights. The second RFP process (started in 2021) is not yet complete, pending conclusion due to some developer requirements that must be completed before the ESSA can be signed by both parties. The team plans to continue seeking bulk storage resources until it meets or exceeds

the 10MW procurement requirement set by the PSC, with anticipated on-going obligations to manage dispatch rights agreements through to conclusion.

V. STAFFING NEEDS

Q. Does Energy Resources require additional Company resources to perform the policy activities related to natural gas discussed in this testimony?

A. Yes, at least one dedicated resource is necessary to handle the increased workload in support of the incremental tasks that have been folded in over the past several years. The incremental work load includes, and is not limited to, increased documentation for Sarbanes Oxley compliance, administration of Value Stack (Case 15-E-0751) generation and Clean Energy Standard (Cases 15-E-0302 and 18-E-0071) Tier 1 REC tracking through NYGATS, gas administrative tasks formerly performed by ANE, administrative tasks related to managing the Bulk Energy Storage (Case 18-E-0130) RFP, incremental analytics and on-going participation related to the Commission's Gas Planning Proceeding (Case 20-G-0131) Long Term Gas Plan requirements, and incremental analytics related to DER Implementation of FERC Order 2222 and PSC Case 22-E-0549.

Q. What impact have electric policies and NYISO governance activities had on Energy Resources?

A. The Energy Resources labor complement has been static for almost 20 years. In that timeframe, incremental responsibilities associated with the

following work activities have materially increased Energy Resources employee workloads:

(1) increasingly complex NYISO market rules and deadlines;

(2) significant increase in the quantity of NYISO governance meetings and time spent to work with other NYISO stakeholders and NYISO staff to create new and to revise existing NYISO market rules and NYISO processes for Central Hudson's electric customers in response to the CLCPA;

(3) increased time spent to follow and participate in Joint Utilities meetings and other industry meetings to coordinate with other New York State utilities regarding the accelerated changes being made to the energy markets to address climate-related initiatives;

(4) incremental compliance obligations relating to Sarbanes Oxley rules; and

(5) incremental responsibilities relating to the PSC Clean Energy Standard and Energy Storage Deployment Program.

Q. How does the Company propose to handle the incremental workload related to natural gas and electric initiatives described above?

A. Energy Resources requires additional labor resources to manage past fold-ins, to continue active meeting participation for protecting Central Hudson customer interests with the evolving NYISO market rules and New York State energy policy initiatives, and to prepare for future energy

storage dispatch right management obligations. As a result, Energy Resources will add one employee in the Rate Year to handle the increased workload to support these initiatives. This resource has been reflected by the Workforce, Compensation, and Benefits Panel.

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.